What is claimed is:

1. A method for providing mobility of a mobile host in a wireless network using multi-protocol label switching as a transport technology between a gateway and a plurality of radio access network domains, comprising the steps of

a) setting up a first multi-protocol label switching tunnel from an ingress node to a first egress node serving a first radio access network domain;

and, if said mobile host moves from a service area of said first radio access network domain to a service area of a second radio access network domain;

b) setting up a second multi-protocol label switching tunnel from said ingress node to a second egress node serving said second radio access network domain;

said mobile host having an IP address in step b) identical with an IP address assigned to said mobile host in step a).

2. The method according to claim 1, said second multi-protocol label switching tunnel having a quality of service parameter equal to a quality of service parameter of said first multi-protocol label switching tunnel.

3. The method according to claim 2, wherein the difference between identifiers of said first and second multi-protocol label switching tunnels is only a tunnel end point address.

4. The method of claim 3, wherein said second multi-protocol label switching tunnel is set up before said first multi-protocol label switching tunnel is torn down.

5. The method of claim 4, wherein said setup of said second multi-protocol label switching tunnel is initiated from said first egress node.

6. The method of claim 5, comprising the steps of c) informing said first egress node about said handover

d) sending, by said first egress node,

d1) an acknowledgement for attachment to said second egress node; and

d2) a message to said ingress node with information about said second egress node;

e) starting, by said ingress node, upon reception of the message specified in d2), said setup of a second multi-protocol label switching tunnel to said second egress node;

f) completing, by said second egress node, after receiving the acknowledgement as specified in d1) and signalling from said ingress node concerning said setup of said second multi-protocol label switching tunnel, handover procedures in said network;

g) switching, by said ingress node, traffic from said first to said second tunnel when a tunnel setup acknowledge is received; and

h) tearing down said first tunnel by the ingress node.

7. The method according to claim 6, wherein step c) comprises

c1) informing, by said mobile host, said second egress node about said IP address of said mobile host and an IP address of said first egress node; and

c2) requesting, by said second egress node, an authorization from said first egress node.

8. The method according to claim 7, wherein said message in step d2) is a dedicated message in a resource reservation protocol.

9. The method according to claim 7, wherein said message in step d2) contains a dedicated object in a resource reservation protocol.

10. The method according to claim 6, wherein in step c) said first egress node is informed about said handover and about an identifier of said second egress node by said mobile host.

11. The method according to claim 6, wherein said ingress node checks in step e) for other available tunnels to said mobile host via said first egress node and starts a set up of a tunnel to said second egress node for each such tunnel.

12. The method of claim 4, wherein said setup of said second multi-protocol label switching tunnel is initiated from said second egress node.

13. The method of claim 12 comprising the steps:

i) informing , by said mobile host, said old egress node about an IP address of said second egress node;

k) sending context information from said old egress node to said second egress node;

l) sending a request from said second egress node to said ingress node to set up said second multi-protocol label switching tunnel;

m) starting, by said ingress node, upon reception of said request specified in c), said setup of said second multi-protocol label switching tunnel to said second egress node;

n) completing, by said second egress node, after receiving signalling from said ingress node concerning said setup of said second multi-protocol label switching tunnel, handover procedures in the network;

o) switching, by said ingress node, traffic from said old tunnel to said second tunnel when a tunnel setup acknowledge is received; and

p) tearing down said old tunnel by said ingress node.

14. The method according to claim 13, wherein said request in step l) is a dedicated message in a resource reservation protocol.

15. The method according to claim 13, wherein said request in step l) is a dedicated object in a resource reservation protocol.

16. The method according to claim 13, wherein said ingress node checks in step m) for other available tunnels to said mobile host via said old egress node and starts a set up of a second tunnel for each such tunnel.

17. A method according to one of the claims 1 to 16, wherein said wireless network is a cellular network.

18. A method according to one of the claims 1 to 16, wherein said wireless network is a wireless local area network.

19. A telecommunication system comprising

a multi-protocol label switching network with a plurality of label switching routers forming nodes of said network, one of said nodes being configured as ingress node to provide connection to an external packet switched network;

a mobile host having an Internet protocol address and being configured to receive packet data;

a plurality of radio access network domains, each of said radio access network domains being configured to provide wireless connection between one of said nodes and said mobile host;

said network being configured to set up a first multi-protocol label switching tunnel from said ingress node to a first egress node connecting a first radio access network domain belonging to a first service area where said mobile host is located, and,

if the mobile host changes its location from said first service area of said first radio access network domain to a second service area of a second radio access network domain,

to set up a second multi-protocol label switching tunnel from said ingress node to a second egress node connecting said second radio access network domain,

wherein said mobile host does not change said Internet protocol address.

20. An apparatus forming a first egress node of a multi-protocol label switching network being configured to receive packet data from an ingress node of said

network through a multi-protocol label switching tunnel and forward said packet data to a mobile host via a first radio access network domain, further being adapted to carry out the following steps:

send, upon receiving information about a handover of said mobile host from said first radio access network domain to a second radio access network domain, an acknowledgement message to a second egress node connecting said second radio access network domain and

send a message to said ingress node with information about said second egress node.

21. An apparatus forming an ingress node from an external packet switched network to a multi-protocol label switching network, being configured to receive packet data from said external network and forward said packet data to a mobile host via a multi-protocol label switching tunnel, a first egress node of the multi-protocol label switching network, and a first radio access network domain, further being adapted to carry out the following steps:

start, upon reception of a message from said first egress node with information about a second egress node connecting a second radio access network domain, into which the location of said mobile host is handed over, a setup of a second multi-protocol label switching tunnel to said second egress node;

switch, upon reception of a tunnel setup acknowledge from said second egress node, traffic from said first to said second tunnel; and

tear down said first tunnel.